

**STATIONARY SOURCE PERMIT TO OPERATE**

**This permit includes designated equipment subject to  
New Source Performance Standards (NSPS).**

This permit supersedes your permit dated April 24, 2007.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Defense Supply Center Richmond  
8000 Jefferson Davis Highway  
Richmond, Virginia 23297-5100  
Registration No.: 50127

is authorized to operate

a maintenance and supply center

located at

8000 Jefferson Davis Highway  
Chesterfield County, Virginia 23297-5100

in accordance with the Conditions of this permit.

Approved on **DRAFT.**

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Robert J. Weld  
Deputy Regional Director

Permit consists of 24 pages.  
Permit Conditions 1 to 62.

## **INTRODUCTION**

This permit approval is based on the permit application dated August 24, 2001 and June 4, 2004, including amendment information dated June 13, 2002, July 11, 2002, December 4, 2002, December 23, 2002, January 6, 2003, January 14, 2003, June 23, 2003, June 27, 2003, July 17, 2003, July 28, 2003, August 3, 2003, August 18, 2003, April 2, 2004, June 1, 2004, June 30, 2004, July 22, 2004, July 26, 2004, November 23, 2004, January 20, 2005, March 17, 2005, August 29, 2005, January 8, 2007, February 2, 2007, February 16, 2007, February 23, 2007, February 27, 2007, March 5, 2007, August 3, 2007, August 24, 2007, October 4, 2007, October 11, 2007, October 18, 2007, and October 29, 2007.

Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses ( ) after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

## **PROCESS REQUIREMENTS**

1. **Equipment List** - Equipment at this facility consists of the following:

<b>Equipment to be Constructed</b>					
<b>Building No.</b>	<b>Reference No.</b>	<b>Equipment Description</b>	<b>Rated Capacity</b>	<b>Manufac./Install Date</b>	<b>Federal Requirements</b>
3	00022	#2 Fuel Oil and Natural Gas Boiler	4.08 MMBtu/hr	2007	--
33	00091	#2 Fuel Oil and Natural Gas Boiler	9.90 MMBtu/hr	2007	--
33	00092	#2 Fuel Oil and Natural Gas Boiler	9.90 MMBtu/hr	2007	--
210	00293	Natural Gas Boiler	0.62 MMBtu/hr	2007	--
210	00294	Natural Gas Emergency Generator	240 KW	2/2007	NSPS, Subpart IIII

<b>Equipment permitted prior to the date of this permit</b>				
<b>Building No.</b>	<b>Reference No.</b>	<b>Equipment Description</b>	<b>Rated Capacity</b>	<b>Manufac./Install Date</b>
<b>BOILERS/DRYERS:</b>				
3	00286	B3-Propane water heater for steaming cylinder	0.30 MMBtu/hr	2000
3	00287	B3-Propane water heater for steaming cylinder	0.30 MMBtu/hr	2000
3	00288	B3-Kerosene Portable Steamer	0.34 MMBtu/hr	2000
4	00001	#2 Fuel Oil and Natural Gas Boiler	4.35 MMBtu/hr	1994
4	00002	#2 Fuel Oil and Natural Gas Boiler	4.35 MMBtu/hr	1994

8	00023	#2 Fuel Oil and Natural Gas Boiler	3.2 MMBtu/hr	2004
9	00024	#2 Fuel Oil and Natural Gas Boiler	2.00 MMBtu/hr	1985
11	00025	#2 Fuel Oil and Natural Gas Boiler	2.00 MMBtu/hr	1984
13	00026	#2 Fuel Oil Boiler	3.1 MMBtu/hr	1991
14	00027	#2 Fuel Oil and Natural Gas Boiler	2.00 MMBtu/hr	1997
19	00028	#2 Fuel Oil Boiler	1.63 MMBtu/hr	1975
20	00029	#2 Fuel Oil Boiler	0.40 MMBtu/hr	1998
20	00030	#2 Fuel Oil Boiler	0.10 MMBtu/hr	Unknown
24	00120	Liquefied petroleum gas (LPG) Boiler	0.14 MMBtu/hr	1987
30	00004	#2 Fuel Oil Boiler	9.8 MMBtu/hr	1983
30	00005	#2 Fuel Oil Boiler	9.8 MMBtu/hr	1982
30	00006	#2 Fuel Oil Boiler	9.8 MMBtu/hr	1982
31	00031	#2 Fuel Oil Boiler	2.62 MMBtu/hr	1999
31	00034	#2 Fuel Oil Boiler	2.62 MMBtu/hr	1999
32	00007	#2 Fuel Oil Boiler	6.70 MMBtu/hr	1983
32	00008	#2 Fuel Oil Boiler	6.70 MMBtu/hr	1983
34	00093	#2 Fuel Oil Boiler	1.30 MMBtu/hr	Prior to 1983
34	00094	#2 Fuel Oil Boiler	1.30 MMBtu/hr	Prior to 1983
40	00032	#2 Fuel Oil Boiler	1.56 MMBtu/hr	1990
44	00098	#2 Fuel Oil and Natural Gas Boiler	1.50 MMBtu/hr	1995
44	00099	#2 Fuel Oil and Natural Gas Boiler	1.50 MMBtu/hr	1995
54	00096	#2 Fuel Oil and Natural Gas Boiler	6.0 MMBtu/hr	1990
54	00097	#2 Fuel Oil and Natural Gas Boiler	6.0 MMBtu/hr	1990
56	00035	#2 Fuel Oil Boiler	0.42 MMBtu/hr	Unknown
59	00010	#2 Fuel Oil and Natural Gas Boiler	5.60 MMBtu/hr	1994
59	00011	#2 Fuel Oil and Natural Gas Boiler	5.60 MMBtu/hr	1994
60	00012	#2 Fuel Oil and Natural Gas Boiler	4.35 MMBtu/hr	1994
60	00013	#2 Fuel Oil and Natural Gas Boiler	4.35 MMBtu/hr	1994
62	00038	#2 Fuel Oil and Natural Gas Boiler	2.00 MMBtu/hr	1988
65	00014	#2 Fuel Oil and Natural Gas Boiler	5.60 MMBtu/hr	1994
65	00015	#2 Fuel Oil and Natural Gas Boiler	5.60 MMBtu/hr	1994
66	00016	#2 Fuel Oil and Natural Gas Boiler	5.60 MMBtu/hr	1994
66	00017	#2 Fuel Oil and Natural Gas Boiler	5.60 MMBtu/hr	1994
74	00041	#2 Fuel Oil Boiler	0.08 MMBtu/hr	Unknown
74	00042	#2 Fuel Oil Boiler	0.08 MMBtu/hr	Unknown
80	00043	#2 Fuel Oil and Natural Gas Boiler	6.0 MMBtu/hr	1992
80	00044	#2 Fuel Oil and Natural Gas Boiler	6.0 MMBtu/hr	1992
80	00114	#2 Fuel Oil Boiler	0.28 MMBtu/hr	Unknown
92	00115	#2 Fuel Oil Boiler	0.25 MMBtu/hr	Unknown
150	00071	#2 Fuel Oil Boiler	1.51 MMBtu/hr	2005
151	00072	#2 Fuel Oil Boiler	3.78 MMBtu/hr	2003
151	00124	Propane Fired Dryer	2.2 MMBtu/hr	2004
154	00116	#2 Fuel Oil Boiler	0.11 MMBtu/hr	Unknown
155	00117	#2 Fuel Oil Boiler	0.12 MMBtu/hr	Unknown
155	00118	#2 Fuel Oil Boiler	0.12 MMBtu/hr	Unknown
61-N	00036	#2 Fuel Oil Boiler	0.17 MMBtu/hr	Unknown
61-S	00037	#2 Fuel Oil and Natural Gas Boiler	3.50 MMBtu/hr	1989
64-B	00039	#2 Fuel Oil and Natural Gas Boiler	6.01 MMBtu/hr	1986
64-D	00040	#2 Fuel Oil Boiler	3.77 MMBtu/hr	1984
OS-1	00018	#2 Fuel Oil Boiler	0.17 MMBtu/hr	1998
201	00282	#2 Fuel Oil and Natural Gas Boiler	0.61 MMBtu/hr	2003
201	00283	#2 Fuel Oil and Natural Gas Boiler	0.60 MMBtu/hr	2003
201	00284	Natural Gas Boiler	0.38 MMBtu/hr	2003
<b>GENERATORS:</b>				
20	00056	Portable Diesel IC Engine	500.0 KW	Unknown
33	00057	Diesel IC Engine	750.0 KW	1987

33	00058	Diesel IC Engine	750.0 KW	1987
33	00059	Diesel IC Engine	750.0 KW	1987
33	00060	Diesel IC Engine	750.0 KW	1987
34	00062	Diesel IC Engine	500.0 KW	1998
54	00061	Diesel IC Engine	800.0 KW	1994
54	00095	Diesel IC Engine	33.0 KW	Unknown
56	00063	Diesel IC Engine	470.0 KW	1998
56	00064	Diesel IC Engine	470.0 KW	1998
80	00223	Diesel IC Engine	300.0 KW	1998
80	00279	Portable Diesel IC Engine	59.7 KW	Unknown
80	00280	Portable Diesel IC Engine	59.7 KW	Unknown
80	00272	Portable Gasoline IC Engine	4.0 KW	Unknown
80	00273	Portable Gasoline IC Engine	4.0 KW	Unknown
80	00274	Portable Gasoline IC Engine	4.0 KW	Unknown
20 & 17	00268	Diesel IC Engine	90.0 KW	1999
201	00281	Diesel IC Engine	350.0 KW	2002
80	00290	Portable Gasoline IC Engine	100.0 HP	Unknown
80	00277	Portable Gasoline IC Engine	14.0 HP	Unknown

**FUEL STORAGE TANKS:**

3	00161	Fuel Oil Underground Storage Tank	5,000 gal	1993
4	00174	Fuel Oil Underground Storage Tank	8,000 gal	2006
4	00189	Kerosene Fuel Aboveground Storage Tank	1,000 gal	1999
8	00160	Fuel Oil Aboveground Storage Tank	6,000 gal	2003
9	00164	Fuel Oil Underground Storage Tank	6,000 gal	1998
11	00162	Fuel Oil Aboveground Storage Tank	4,000 gal	2003
12	00083	Gasoline Underground Storage Tank	1,000 gal	1991
13	00167	Fuel Oil Aboveground Storage Tank	8,000 gal	2003
14	00104	Fuel Oil Aboveground Storage Tank	5,000 gal	1999
19	00165	Fuel Oil Underground Storage Tank	6,000 gal	1991
20	00157	Fuel Oil Aboveground Storage Tank	2,000 gal	2003
30	00175	Fuel Oil Aboveground Storage Tank	8,000 gal	2004
30	00208	Diesel Aboveground Storage Tank	50 gal	Unknown
31	00261	Fuel Oil Aboveground Storage Tank	50 gal	Unknown
31	00292	Fuel Oil Aboveground Storage Tank	6,000 gal	2006
32	00267	Diesel Aboveground Storage Tank	10,000 gal	1994
32	00180	Fuel Oil Underground Storage Tank	20,000 gal	1991
33	00217	Diesel Aboveground Storage Tank	10,000 gal	Unknown
33	00262	Diesel Aboveground Storage Tank	50 gal	Unknown
33	00263	Diesel Aboveground Storage Tank	50 gal	Unknown
33	00264	Diesel Aboveground Storage Tank	50 gal	Unknown
33	00265	Diesel Aboveground Storage Tank	50 gal	Unknown
33	00176	Fuel Oil Underground Storage Tank	15,000 gal	1991
34	00171	Fuel Oil Underground Storage Tank	8,000 gal	1991
40	00156	Fuel Oil Underground Storage Tank	1,500 gal	1991
44	00169	Fuel Oil Underground Storage Tank	10,000 gal	Unknown
54	00212	Diesel Aboveground Storage Tank	75 gal	1999
54	00216	Diesel Aboveground Storage Tank	2,000 gal	1998
54	00181	Fuel Oil Underground Storage Tank	20,000 gal	1991
56	00213	Diesel Aboveground Storage Tank	500 gal	1998
56	00214	Diesel Aboveground Storage Tank	500 gal	1998
56	00199	Fuel Oil Aboveground Storage Tank	1,000 gal	1994
59	00177	Fuel Oil Underground Storage Tank	15,000 gal	1992
62	00201	Fuel Oil Aboveground Storage Tank	1,000 gal	Prior to 1978
65	00178	Fuel Oil Underground Storage Tank	15,000 gal	1991
66	00179	Fuel Oil Underground Storage Tank	15,000 gal	1991
74	00149	Fuel Oil Aboveground Storage Tank	1,000 gal	2003

80	00224	Diesel Aboveground Storage Tank	2,000 gal	2000
80	00170	Fuel Oil Underground Storage Tank	15,000 gal	1992
92	00193	Fuel Oil Aboveground Storage Tank	275 gal	Prior to 1978
60	00206	Fuel Oil Aboveground Storage Tank	10,000 gal	Unknown
65	00085	Gasoline Underground Storage Tank	2,500 gal	1988
126	00221a	Diesel Underground Storage Tank	12,000 gal	1990
126	00221b	Gasoline Underground Storage Tank	12,000 gal	1990
140	00211	Fuel Oil Aboveground Storage Tank	275 gal	1998
150	00218	Gasoline Aboveground Storage Tank	500 gal	1999
150	00187	Diesel Underground Storage Tank	6,000 gal	1993
150	00202	Fuel Oil Aboveground Storage Tank	2,000 gal	1999
151	00166	Fuel Oil Aboveground Storage Tank	6,000 gal	2003
154	00194	Fuel Oil Aboveground Storage Tank	250 gal	2003
155	00203	Fuel Oil Aboveground Storage Tank	1,000 gal	2003
61-S	00168	Fuel Oil Underground Storage Tank	8,000 gal	1989
64-D	00163	Fuel Oil Aboveground Storage Tank	2,000 gal	2003
OS-1	00197	Fuel Oil Aboveground Storage Tank	275 gal	2003
OS-2	00084	Gasoline Aboveground Storage Tank	1,000 gal	2005
201	00285	Diesel Aboveground Storage Tank	2,000 gal	2003
<b>MISCELLANEOUS:</b>				
3	00049	Caps Abrasive Cleaner	3000.00 lbs/hr	1987
3	00048	Cylinder Abrasive Cleaner	3000.00 lbs/hr	1987
3	00047	Paint Spray Booth with Propane Fired Dryer	1.25 gal/hr 0.8 MMBtu/hr	2001
3	00066	Primer Paint Spray Booth	1.25 gal/hr	2001
11	00237	Woodworking Shop containing: one Circular Saw, four Radial Overarm Saws.	--	Unknown
20	00238	Woodworking Shop containing: two Dewalt cutters, Delta saw, Rockwell Delta bandsaw, Vertical Bandsaw, Oliver cutter, Delta unisaw, Tilting Arbor Saw, Dewalt blade cutter, Delta cutter, Belt sander/desc grinder.	--	Unknown
56	00053	Air Stripping System (O9)	65.00 gal/min	1996
66	00231	Map Disintegrator	4700.0 tons/yr	2000
80	00050	Paint Spray Booth	1.25 gal/hr	1991
107	00054	Dual Phase Vapor Extraction Plant (O8)	--	1996
151	00081	Paint Spray Booth	1.25 gal/hr	1987
151	00112	Gun Cleaner/Degreaser	6.0 gal	2007

(9 VAC 80-1180 D 3 and 9 VAC 5-80-850)

- VOC Emission Controls at the Spray Booths** – Volatile organic compound (VOC) emissions from the coating process at spray booths 00047, 00066, 00050, and 00081 shall be controlled by limiting the surface coating throughput and the VOC content of the surface coating. The spray booths shall be provided with adequate access for inspection.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
- VOC Emission Controls at the Spray Booths** – The VOC content of the surface coating as applied during the surface coating process at spray booths 00047, 00066, 00050, and 00081 shall not exceed 4.5 pounds per gallon of coating. A change in the VOC content may require a permit to modify and operate.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
- VOC Emission Controls** – VOC emissions controls from cleanup, washup, and disposal shall include the following, or equivalent, as a minimum:

- a. VOC shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
- b. All VOC containing receptacles and receptacles containing cleaning rags shall be closed at all times except during loading and unloading.
- c. VOC emissions shall be controlled and/or reduced by storing cleaning solutions and applicators in covered containers or machines with remote reservoirs when not in use.

(9 VAC 5-50-260, 9 VAC 5-50-20F, and 9 VAC 5-80-850)

5. **Particulate Matter Emission Controls at the Spray Booths** - Particulate Matter emissions from the coating process at spray booths 00047, 00050, and 00081 shall each be controlled by a fiberglass dry filter with a minimum control efficiency of 60% (for 00047), 97% (for 00050), and 98% (for 00081). Particulate Matter emissions from the primer spray booth 00066 shall be controlled by a water wall with a minimum control efficiency of 85%. Each control device shall be provided with adequate access for inspection and shall be in operation when the spray booths are operating.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
6. **Abrasive Cleaner Emission Controls** - Particulate Matter emissions from the abrasive cleaners (Ref. Nos. 00048 and 00049) shall each be controlled by a cartridge filter dust collector with a minimum control efficiency of 99%. Each cartridge filter shall be equipped with a device to continuously measure the differential pressure drop across the filters. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The cartridge filter dust collector shall be provided with adequate access for inspection and shall be in operation when the abrasive cleaners are operating.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
7. **Map Disintegrator Emission Controls** - Particulate Matter emissions from the map disintegrator (Ref. No. 00231) shall be controlled by a cyclone and baghouse dust collection system with minimum overall control efficiency of 99%. The cyclone and baghouse dust collection system shall be provided with adequate access for inspection and shall be in operation when the map disintegrator is operating.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
8. **Gun Cleaner/Degreaser Emission Controls** - VOC emissions from the gun cleaner/degreaser (Ref. No. 00112) shall be controlled by limiting the throughput of volatile organic compounds (VOCs).  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
9. **Woodworking Emission Controls** - Particulate Matter emissions from the woodworking equipment (Ref. No. 00237) shall be controlled by a cyclone and a baghouse. Both the cyclone and the baghouse shall be provided with adequate access for inspection and shall be in operation when the woodworking equipment is operating.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)
10. **Woodworking Emission Controls** - Particulate Matter emissions from the woodworking shop Ref. No. 00238 shall be controlled by a cyclone. The cyclone shall be provided with adequate access for inspection and shall be in operation when the woodworking equipment is operating.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

11. **Storage** - The permittee is authorized to store only the petroleum product specified in Condition 1 for each respective storage tank or any product with a vapor pressure that does not exceed the vapor pressure of the petroleum product specified in Condition 1 for each respective storage tank and does not emit any hazardous air pollutant that exceeds the Virginia State Toxic exemption level. The facility wide hazardous air pollutant emission limit must be less than the limit set forth in Condition 26. A change in the materials stored may require a permit to modify and operate.  
(9 VAC 5-80-850)

### **OPERATING LIMITATIONS**

12. **Operating Hours** - The generators shall not operate more than the following hours per year:

<b>Building Number</b>	<b>Unit Number</b>	<b>Hours/year</b>
20 & 17	00268	250
20	00056	250
33	00057	400
33	00058	400
33	00059	400
33	00060	400
34	00062	250
54	00061	250
54	00095	250
56	00063	250
56	00064	250
80	00223	250
80	00290	500
80	00277	250
80	00272	250
80	00273	1,000
80	00274	1,000
80	00275	500
80	00279	250
80	00280	250
200	00129	250
201	00281	250
<b>210</b>	<b>00294</b>	<b>300</b>

The hours of operation for each generator shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)

13. **Throughput** - The application rate of the surface coating shall not exceed 2.0 gallons per hour at spray booth Ref. No. 00047. A change in the application rate may require a permit to modify and operate. The throughput of surface coating to spray booth reference number 00047 shall be no more than 4,200 gallons per year calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)



14. **Throughput** - The application rate of the surface coating shall not exceed 1.25 gallons per hour at spray booth Ref. No. 00050. When using MIL-DTL-64159, Type II, Part B and Nason Activator-483-15, the application rate shall not exceed 0.55 gallons per hour. A change in the application rate may require a permit to modify and operate. The throughput of surface coating to spray booth reference number 00050 shall be no more than 1,200 gallons per year calculated monthly as the sum of each consecutive 12-month period. The throughput of thinner to spray booth reference number 00050 shall be no more than 600 gallons per year calculated monthly as the sum of each consecutive 12-month period. The throughput of reducer to spray booth reference number 00050 shall be no more than 600 gallons per year calculated monthly as the sum of each consecutive 12-month period. The throughput of primer to spray booth reference number 00050 shall be no more than 400 gallons per year calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)
15. **Throughput** - The application rate of the surface coating shall not exceed 1.25 gallons per hour at spray booth Ref. No. 00066. A change in the application rate may require a permit to modify and operate. The throughput of surface coating to spray booth reference number 00066 shall be no more than 2,400 gallons per year calculated monthly as the sum of each consecutive 12-month period. The throughput of thinner to spray booth reference number 00066 shall be no more than 1,200 gallons per year calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)
16. **Throughput** - The application rate of the surface coating shall not exceed 1.25 gallons per hour at spray booth Ref. No. 00081. When using Catalyst - V93V502 and Catalyst - Water Reducible, the application rate shall not exceed 0.61 gallons per hour. A change in the application rate may require a permit to modify and operate. The throughput of surface coating to spray booth reference number 00081 shall be no more than 1,200 gallons per year calculated monthly as the sum of each consecutive 12-month period. The throughput of thinner to spray booth reference number 00081 shall be no more than 600 gallons per year calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)
17. **Throughput** - The throughput of grit shot consumed by the abrasive cleaners (Ref. Nos. 00048 and 00049) shall not exceed 6,240,000 pounds per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)
18. **Throughput** - The throughput of maps to the map disintegrator (Ref. No. 00231) shall be no more than 4,380 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)
19. **Throughput** - The throughput of solvent to the gun cleaner/degreaser (Ref. No. 00112) shall not exceed 100 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total



for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)

20. **Throughput** - The throughput of wood to the woodworking shop (Ref. No. 00237) shall be no more than 200,000 board feet per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)

21. **Throughput** - The throughput of wood to the woodworking shops (Ref. No. 00238) shall be no more than 200,000 board feet per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)

22. **Throughput** - The fuel storage tanks shall not exceed the throughput limits listed as follows:

Building Number	Ref. No:	Fuel Product	Throughput Limit (Gallons/year)
3	00161	Number 2 Fuel Oil	60,647
4	00174	Number 2 Fuel Oil	188,093
4	00189	Kerosene	1,000
8	00160	Number 2 Fuel Oil	47,543
9	00164	Number 2 Fuel Oil	43,243
11	00162	Number 2 Fuel Oil	43,243
12	00083	Gasoline	3,000
13	00167	Number 2 Fuel Oil	54,184
14	00104	Number 2 Fuel Oil	43,243
19	00165	Number 2 Fuel Oil	35,251
20	00157	Number 2 Fuel Oil	31,098
30	00175	Number 2 Fuel Oil	627,480
30	00208	Diesel	500
31	00261	Number 2 Fuel Oil	2,000
31	00292	Number 2 Fuel Oil	113,098
32	00180	Number 2 Fuel Oil	217,559
32	00267	Number 2 Fuel Oil	218,160
33	00176	Number 2 Fuel Oil	294,171
33	00217	Diesel	89,600
33	00262	Diesel	22,400
33	00263	Diesel	22,400
33	00264	Diesel	22,400
33	00265	Diesel	22,400
34	00171	Number 2 Fuel Oil	51,740
40	00156	Number 2 Fuel Oil	33,683
44	00169	Number 2 Fuel Oil	64,714
54	00181	Number 2 Fuel Oil	140,143
54	00212	Diesel	732
54	00216	Diesel	15,000
56	00199	Number 2 Fuel Oil	26,280
56	00213	Diesel	8,750

56	00214	Diesel	8,750
59	00177	Number 2 Fuel Oil	241,920
60	00206	Number 2 Fuel Oil	188,093
61-S	00168	Number 2 Fuel Oil	75,600
62	00201	Number 2 Fuel Oil	43,243
64-D	00163	Number 2 Fuel Oil	81,389
65	00178	Number 2 Fuel Oil	241,920
65	00085	Gasoline	3,000
66	00179	Number 2 Fuel Oil	241,920
74	00149	Number 2 Fuel Oil	9,461
80	00170	Number 2 Fuel Oil	157,663
80	00224	Diesel	5,625
92	00193	Number 2 Fuel Oil	15,330
126	00221a	Diesel	100,000
126	00221b	Gasoline	100,000
140	00211	Diesel	500
150	00187	Diesel	20,000
150	00202	Number 2 Fuel Oil	42,336
150	00218	Gasoline	2,000
151	00166	Number 2 Fuel Oil	81,648
154	00194	Number 2 Fuel Oil	6,570
155	00203	Number 2 Fuel Oil	14,767
201	00285	Number 2 Fuel Oil	26,093
OS-1	00197	Number 2 Fuel Oil	10,794
OS-2	00084	Gasoline	5,000

The throughputs shall be calculated as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-850)

23. **Throughput** - The throughput of VOC to the OU-8 Dual Phase Vapor Extraction Plant (Ref. No. 00054) shall be less than 5.7 tons per year, calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-850)

24. **Throughput** - The throughput of VOC to the OU-9 Air Stripping System (Ref. No. 00053) shall be less than 0.1 tons per year, calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-850)

25. **Throughput** - The throughput of Hazardous Air Pollutants (HAPs) as defined by §112b of the Clean Air Act Amendments, shall not exceed 9.0 tons per year of any one HAP, calculated monthly as the sum of each consecutive 12-month period. Additionally, the combined throughput of all HAPs shall not exceed 24 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-60-100 and 9 VAC 5-50-260)

26. **Boiler/Dryer Fuel** - The approved fuels for the boilers and dryers are distillate oil, liquefied petroleum gas (LPG), natural gas, and kerosene respectively as specified in Condition 1. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-1180 and 9 VAC 5-80-850)
27. **Generator Fuel** - The approved fuels for the generators are diesel fuel, gasoline, and natural gas respectively as specified in Condition 1. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-1180 and 9 VAC 5-80-850)
28. **Boiler Fuel Throughput** - The boilers shall consume no more than the following limits:

Building Number	Fuel Oil Limit (Gallons/year)	Natural Gas Limit (scf/year)	LPG Limit (Gallons/year)
3	60,647.0	8,086,248.0	134,763.2
4	188,092.8	24,192,000.0	-
8	47,543.0	6,339,048.0	-
9	43,243.2	5,760,000.0	-
11	43,243.2	5,760,000.0	-
13	54,184.0	-	-
14	43,243.2	5,760,000.0	-
19	35,251.2	-	-
20	31,098.0	-	-
24	-	-	13,419.6
30	627,480.0	-	-
31	113,097.6	-	-
32	217,559.0	-	-
33	294,171.0	39,222,857.0	-
34	51,740.0	-	-
40	33,683.0	-	-
44	64,713.6	8,640,000.0	-
54	140,143.0	17,280,000.0	-
56	26,280.0	-	-
59	241,920.0	32,256,000.0	-
60	188,092.8	24,192,000.0	-
62	43,243.2	5,760,000.0	-
65	241,920.0	32,256,000.0	-
66	241,920.0	32,256,000.0	-
74	9,460.8	-	-
80	157,663.0	17,280,000.0	-
92	15,330.0	-	-
150	42,336.0	-	-
151	81,648.0	-	48,681.0
154	6,570.0	-	-
155	14,766.9	-	-
174	17,520.0	-	-
175	17,520.0	-	-
200	31,536.0	-	23,297.9
61-N	10,793.6	-	-
61-S	75,600.0	10,080,000.0	-
64-B	129,729.6	17,280,000.0	-
64-D	81,388.8	-	-

OS-1	10,793.6	-	-
201	26,093.0	4,555,152.0	-
210		2,055,529	

The fuel limits shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-850)

29. **Fuel** - The distillate oil, LPG, natural gas, kerosene, and gasoline shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment: **0.22%**

NATURAL GAS:

Minimum heat content: **1020 Btu/cf HHV**  
as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method.

LPG, including butane and propane, which meets ASTM specification D1835

Kerosene, which meets ASTM specification D3699

Gasoline, which meets ASTM specifications D4814

(9 VAC 5-80-1180 and 9 VAC 5-80-850)

30. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

- The name of the fuel supplier;
- The date on which the distillate oil was received;
- The quantity of distillate oil delivered in the shipment;
- A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil;
- The sulfur content of the distillate oil;

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 30. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-170-160 and 9 VAC 5-80-850)

31. **Fuel Monitoring** - The fuel oil used at each building containing one or more boilers burning distillate oil shall be measured by use of a fuel meter or by mass balance. The tank readings at each building by fuel meter or by mass balance shall be observed and recorded on a monthly basis. The sum of fuel oil usage shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-50-260)

32. **Operating and Training Procedures** - Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-170-160 and 9 VAC 5-80-850)

### **EMISSION LIMITS**

33. **Process Emission Limits** - Emissions from the operation of the boilers and dryers shall not exceed the limits specified below:

#### **HOURLY**

<b>Building Number</b>	<b>PM (lbs/hr)</b>	<b>PM-10 (lbs/hr)</b>	<b>SO<sub>2</sub> (lbs/hr)</b>	<b>CO (lbs/hr)</b>	<b>VOC (lbs/hr)</b>	<b>NO<sub>x</sub> (lbs/hr)</b>
3	0.1	0.1	0.9	0.5	<0.1	1.2
4	0.2	0.1	2.0	1.0	0.1	2.0
8	0.1	<0.1	0.8	0.3	<0.1	0.5
9	<0.1	<0.1	0.5	0.2	<0.1	0.5
11	<0.1	<0.1	0.5	0.2	<0.1	0.5
13	<0.1	<0.1	0.7	0.1	<0.1	0.5
14	<0.1	<0.1	0.5	0.2	<0.1	0.5
19	<0.1	<0.1	0.4	0.1	<0.1	0.2
20	<0.1	<0.1	0.1	<0.1	<0.1	0.1
24	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	0.4	0.3	6.6	1.1	0.1	4.2
31	0.1	<0.1	1.2	0.2	<0.1	0.8
32	0.2	0.1	3.0	0.5	<0.1	2.0
33	0.4	0.3	4.4	2.3	0.2	4.7
34	<0.1	<0.1	0.6	0.1	<0.1	0.4
40	<0.1	<0.1	0.4	0.1	<0.1	0.2
44	0.1	<0.1	0.7	0.4	<0.1	0.7
54	0.2	0.1	2.7	1.0	0.1	1.8
56	<0.1	<0.1	0.1	<0.1	<0.1	0.1
59	0.2	0.2	2.5	1.3	0.1	2.7
60	0.2	0.1	2.0	1.0	0.1	2.0
62	<0.1	<0.1	0.5	0.2	<0.1	0.5
65	0.2	0.2	2.5	1.3	0.1	2.7
66	0.2	0.2	2.5	1.3	0.1	2.7
74	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
80	0.2	0.1	3.4	1.1	0.1	2.2
92	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
150	<0.1	<0.1	0.3	0.1	<0.1	0.2
151	0.1	<0.1	0.9	0.2	<0.1	0.6
154	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
155	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
201	<0.1	<0.1	0.3	0.2	<0.1	0.3

Building Number	PM (lbs/hr)	PM-10 (lbs/hr)	SO2 (lbs/hr)	CO (lbs/hr)	VOC (lbs/hr)	NOx (lbs/hr)
61-N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
61-S	0.1	0.1	0.8	0.4	<0.1	0.8
64-B	0.1	0.1	1.3	0.7	0.1	1.4
64-D	0.1	<0.1	0.8	0.1	<0.1	0.5
OS-1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
210	<0.1	<0.1	<0.1	0.1	<0.1	0.1

**ANNUAL**

Building Number	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	CO (tons/yr)	VOC (tons/yr)	NOx (tons/yr)
3	0.1	0.1	1.0	0.7	0.1	2.1
4	0.3	0.2	3.0	1.5	0.1	3.1
8	0.1	0.1	0.7	0.4	<0.1	0.8
9	0.1	0.1	0.7	0.4	<0.1	0.7
11	0.1	0.1	0.7	0.4	<0.1	0.7
13	0.1	<0.1	0.9	0.2	<0.1	0.6
14	0.1	0.1	0.7	0.4	<0.1	0.7
19	<0.1	<0.1	0.6	0.1	<0.1	0.4
20	<0.1	<0.1	0.5	0.1	<0.1	0.3
24	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
30	0.7	0.4	10.0	1.6	0.1	6.3
31	0.1	0.1	1.8	0.3	<0.1	1.1
32	0.2	0.1	3.4	0.6	<0.1	2.2
33	0.4	0.3	4.6	2.4	0.2	4.9
34	0.1	<0.1	0.8	0.1	<0.1	0.5
40	<0.1	<0.1	0.5	0.1	<0.1	0.3
44	0.1	0.1	1.0	0.5	<0.1	1.1
54	0.2	0.2	2.2	1.1	0.1	2.3
56	<0.1	<0.1	0.4	0.1	<0.1	0.3
59	0.4	0.3	3.8	2.0	0.1	4.0
60	0.3	0.2	3.0	1.5	0.1	3.1
62	0.1	0.1	0.7	0.4	<0.1	0.7
65	0.4	0.3	3.8	2.0	0.1	4.0
66	0.4	0.3	3.8	2.0	0.1	4.0
74	<0.1	<0.1	0.1	<0.1	<0.1	0.1
80	0.2	0.2	2.5	1.1	0.1	2.5
92	<0.1	<0.1	0.2	<0.1	<0.1	0.2
150	<0.1	<0.1	0.7	0.1	<0.1	0.4
151	0.1	0.1	1.3	0.3	<0.1	1.2
154	<0.1	<0.1	0.1	<0.1	<0.1	0.1
155	<0.1	<0.1	0.2	<0.1	<0.1	0.1
201	0.1	0.1	1.2	0.4	<0.1	1.0
61-N	<0.1	<0.1	0.2	<0.1	<0.1	0.1
61-S	0.1	0.1	1.2	0.6	<0.1	1.3
64-B	0.2	0.1	2.0	1.1	0.1	2.2
64-D	0.1	<0.1	1.3	0.2	<0.1	0.8
OS-1	<0.1	<0.1	0.2	<0.1	<0.1	0.1
210	<0.1	<0.1	<0.1	0.1	<0.1	0.1



These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 26, 28, and 29.

(9 VAC 5-50-260 and 9 VAC 5-80-850)

34. **Process Emission Limits** - Emissions from the operation of the generators shall not exceed the limits specified below:

#### HOURLY

Unit Number	Building Number	PM (lb/hr)	PM-10 (lb/hr)	SO2 (lb/hr)	CO (lb/hr)	VOC (lb/hr)	NOx (lb/hr)
00056	20	0.5	0.5	1.2	3.7	0.5	16.1
00057	33	0.7	0.7	1.8	5.5	0.7	24.1
00058	33	0.7	0.7	1.8	5.5	0.7	24.1
00059	33	0.7	0.7	1.8	5.5	0.7	24.1
00060	33	0.7	0.7	1.8	5.5	0.7	24.1
00062	34	0.5	0.5	1.2	3.7	0.5	16.1
00061	54	0.8	0.8	1.9	5.9	0.8	25.7
00095	54	0.1	0.1	<0.1	0.3	0.0	1.4
00063	56	0.4	0.4	1.1	3.5	0.4	15.1
00064	56	0.4	0.4	1.1	3.5	0.4	15.1
00131	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00132	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00148	80	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
00223	80	0.9	0.9	0.2	2.7	1.0	12.5
00268	20 & 17	0.3	0.3	0.1	0.8	0.3	3.7
00272	80	<0.1	<0.1	<0.1	2.4	0.1	0.1
00273	80	<0.1	<0.1	<0.1	2.4	0.1	0.1
00274	80	<0.1	<0.1	<0.1	2.4	0.1	0.1
00275	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00277	80	<0.1	<0.1	<0.1	6.2	0.3	0.2
00279	80	0.2	0.2	<0.1	0.5	0.2	2.5
00280	80	0.2	0.2	<0.1	0.5	0.2	2.5
00281	201	1.0	1.0	0.2	3.2	1.2	14.6
00290	80	0.1	0.1	<0.1	43.9	2.1	1.1
00294	210	<0.1	<0.1	<0.1	1.6	0.4	12.0

#### ANNUAL

Unit Number	Building Number	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	CO (tons/yr)	VOC (tons/yr)	NOx (tons/yr)
00056	20	0.1	0.1	0.2	0.5	0.1	2.0
00057	33	0.1	0.1	0.4	1.1	0.1	4.8
00058	33	0.1	0.1	0.4	1.1	0.1	4.8
00059	33	0.1	0.1	0.4	1.1	0.1	4.8
00060	33	0.1	0.1	0.4	1.1	0.1	4.8
00062	34	0.1	0.1	0.2	0.5	0.1	2.0
00061	54	0.1	0.1	0.2	0.7	0.1	3.2
00095	54	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
00063	56	0.1	0.1	0.1	0.4	0.1	1.9

Unit Number	Building Number	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	CO (tons/yr)	VOC (tons/yr)	NOx (tons/yr)
00064	56	0.1	0.1	0.1	0.4	0.1	1.9
00131	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00132	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00148	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00223	80	0.1	0.1	<0.1	0.3	0.1	1.6
00268	20 & 17	<0.1	<0.1	<0.1	0.1	<0.1	0.5
00272	80	<0.1	<0.1	<0.1	0.3	<0.1	<0.1
00273	80	<0.1	<0.1	<0.1	1.2	0.1	<0.1
00274	80	<0.1	<0.1	<0.1	1.2	0.1	<0.1
00275	80	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
00277	80	<0.1	<0.1	<0.1	0.8	<0.1	<0.1
00279	80	<0.1	<0.1	<0.1	0.1	<0.1	0.3
00280	80	<0.1	<0.1	<0.1	0.1	<0.1	0.3
00281	201	0.1	0.1	<0.1	0.4	0.2	1.8
00290	80	<0.1	<0.1	<0.1	11.0	0.5	0.3
00294	210	<0.1	<0.1	<0.1	0.3	0.1	1.8

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 12, 27, and 29.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

35. **Emission Limits** - Emissions from the operation of the spray booth Ref. No. 00047 shall not exceed the limits specified below:

Particulate Matter	2.1 lbs/hr	2.2 tons/yr
PM-10	2.1 lbs/hr	2.2 tons/yr
Volatile Organic Compounds	8.6 lbs/hr	9.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 3, 5, 13, and 25.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

36. **Emission Limits** - Emissions from the operation of spray booth Ref. No. 00050 including coatings, primers, thinners and reducers shall not exceed the limits specified below:

Volatile Organic Compounds	28.4 lbs/hr	7.7 tons/yr
Hexamethylene Diisocyanate Monomer (822-06-0)	0.0200 lbs/hr	0.0163 tons/yr
Cobalt Compounds	0.0265 lbs/hr	0.0127 tons/yr
Chromium Compounds	0.0408 lbs/hr	0.0196 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 3, 5, 14, and 25.  
 (9 VAC 5-50-260 and 9 VAC 5-80-850)

37. **Emission Limits** - Emissions from the operation of spray booth Ref. No.00066 including coatings and thinners shall not exceed the limits specified below:

Particulate Matter	0.8 lbs/hr	0.8 tons/yr
PM-10	0.8 lbs/hr	0.8 tons/yr
Volatile Organic Compounds	13.4 lbs/hr	9.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 3, 5, 15, and 25.  
 (9 VAC 5-50-260 and 9 VAC 5-80-850)

38. **Emission Limits** - Emissions from the operation of spray booth Ref. No. 00081 shall not exceed the limits specified below:

Volatile Organic Compounds	13.6 lbs/hr	4.3 tons/yr
Hexamethylene Diisocyanate Monomer (822-06-0)	0.0122 lbs/hr	0.0106 tons/yr
Cobalt Compounds	0.0177 lbs/hr	0.0085 tons/yr
Chromium Compounds	0.0272 lbs/hr	0.0130 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 3, 5, 16, and 25.  
 (9 VAC 5-50-260 and 9 VAC 5-80-850)

39. **Emission Limits** - Emissions from the operation of the abrasive cleaners shall not exceed the limits specified below:

Particulate Matter	5.5 lbs/hr	5.7 tons/yr
PM-10	0.8 lbs/hr	0.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 6 and 17.  
 (9 VAC 5-50-260 and 9 VAC 5-80-850)

40. **Emission Limits** - Emissions from the operation of the map disintegrator (Ref. No. 00231) shall not exceed the limits specified below:

Particulate Matter	1.0 lbs/hr	4.4 tons/yr
PM-10	1.0 lbs/hr	4.4 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 7 and 18.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

41. **Emission Limits** - Emissions from the woodworking operation (Ref. No. 00238) shall not exceed the limits specified below:

Particulate Matter	0.6 tons/yr
PM-10	0.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 10 and 21.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

42. **Emission Limits** - Emissions from the aboveground and underground storage tanks shall not exceed the limits specified below:

Volatile Organic Compounds	1.0 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 11 and 22.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

43. **Emission Limits** - Emissions from the operation of the OU-8 Dual Phase Vapor Extraction Plant (Ref. No. 00054) shall not exceed the limits specified below:

Volatile Organic Compounds	1.3 lbs/hr	5.7 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 23 and 25.  
(9 VAC 5-50-260 and 9 VAC 5-80-850)

44. **Facility wide Emission Limits** - Total emissions from the facility shall not exceed the limits specified below:

Particulate Matter	21.6 lbs/hr	20.3 tons/yr
PM-10	15.7 lbs/hr	13.7 tons/yr
Sulfur Dioxide	57.2 lbs/hr	61.6 tons/yr

Nitrogen Oxides (as NO <sub>2</sub> )	275.1	lbs/hr	91.5	tons/yr
Carbon Monoxide	126.1	lbs/hr	44.9	tons/yr
Volatile Organic Compounds	77.9	lbs/hr	40.4	tons/yr
Hexamethylene Diisocyanate Monomer (822-06-0)	0.0323	lbs/hr	0.0269	tons/yr
Cobalt Compounds	0.0442	lbs/hr	0.0212	tons/yr
Chromium Compounds	0.0679	lbs/hr	0.0326	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2-32.

(9 VAC 5-50-260 and 9 VAC 5-80-850)

45. **Emission Limits** - Hazardous air pollutant (HAP) emissions, as defined by §122(b) of the Clean Air Act, shall not exceed 10 tons per year of any individual HAP or 25 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions annual limitations.

(9 VAC 5-80-850, 9 VAC 5-170-160, and 9 VAC 5-60-100)

46. **Toxics, Hazardous Air Pollutants** - As of the date of this permit, the permittee is limited to use of the following volatile hazardous air pollutants (HAPs) facility wide in coatings, adhesives, inks, thinners, fountain solutions, and cleaning solutions for the paint spray booths (Ref. Nos. 00047, 00050, 00066, and 00081):

<u>Volatile HAPs</u>	<u>CAS Number</u>
Xylene	1330-20-7
Ethyl Benzene	100-41-4
Toluene	108-88-3
Methanol	67-56-1
Hexamethylene Diisocyanate Monomer	822-06-0
Methyl Isobutyl Ketone	108-10-1
Naphthalene	91-20-3
Benzene	71-43-2
1,1 Dichloroethylene	75-35-4
Perchloroethylene	127-18-4
Trichloroethylene	79-01-6
Cobalt Compounds	N/a
Chromium Compounds	N/a
Glycol Ethers	N/a

The permittee may use additional HAPs (listed in Attachment A) in the spray booths under 9 VAC 5-50-160 D without obtaining a new permit provided the following conditions are met:

- a. Notification shall be given to the Director, Piedmont Region. Such notification shall be made within fifteen (15) days after the use of additional HAPs and shall include identification of the

HAPs, the date the HAP was first used, and the anticipated maximum throughput of that compound in lbs/hr and tons/yr. Additional details of the notification should be arranged with the Director, Piedmont Region.

- b. The permittee shall operate this facility in compliance with 9 VAC Chapter 50, Article 3, for all HAPs.
- c. The permittee shall not use any HAP, which would make the facility subject to federal emission standards in 40 CFR 61 or 40 CFR 63.
- d. If a permit is required, failure to obtain the permit prior to the change in process formulation or the use of any additional HAP may result in enforcement action.

(9 VAC 5-80-850, 9 VAC 5-170-160, and 9 VAC 5-50-200)

- 47. **Visible Emission Limit** - Visible emissions from the boilers and dryers shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-850)
- 48. **Visible Emission Limit** - Visible emissions from the generators shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9 VAC 5-40-80 and 9 VAC 5-80-850)
- 49. **Visible Emission Limit** - Visible emissions from the spray booths (Ref. Nos. 00047, 00050, 00066, and 00081) shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-850)
- 50. **Visible Emission Limit** - Visible emissions from the abrasive cleaners (Ref. Nos. 00048 and 00049) shall not exceed 10 percent except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-850)
- 51. **Visible Emission Limit** - Visible emissions from the map disintegrator (Ref. No. 00231) shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-850)
- 52. **Visible Emission Limit** - Visible emissions from the woodworking shops (Ref. Nos. 00237 and 00238) shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-850)

## **NOTIFICATIONS**

**53. Initial Notifications** - The permittee shall furnish written notification to the Director, Piedmont Region:

- a. The actual date on which construction of the new boilers and generator commenced within 30 days after such date.



b. The anticipated start-up date of the new boilers and generator postmarked not more than 60 days nor less than 30 days prior to such date.

c. The actual start-up date of the new boilers and generator within 15 days after such date.

(9 VAC 5-50-50)

## **RECORDS**

54. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

- a. Annual hours of operation of the generators, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Monthly and annual throughput of natural gas, LPG, and/or distillate oil to the boilers, dryers, and generators. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- c. Monthly and annual throughput of number 2 fuel oil, kerosene, and gasoline to the storage tanks. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- d. Monthly and annual throughput of surface coatings (in gallons) to each paint spray booth. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- e. Hourly usage of surface coatings, thinners, reducers, and primers (in gallons/hr) to each paint spray booth to show compliance with Conditions 14-17. This shall include keeping records of hours of operation and the amount of product sprayed for each spray booth.
- f. Monthly and annual usage (in gallons) in each paint spray booth operations of cleaning compound. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- g. Monthly and annual throughput of the gun cleaner/degreaser solvent (in gallons). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- h. Monthly and annual throughput of grit shot to the abrasive cleaners (in pounds). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- i. Monthly and annual throughput of maps to the map disintegrator (in pounds). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- j. Monthly and annual throughput of wood to each woodworking operation (in board feet). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- k. Monthly and annual VOC emissions from each paint spray booth. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- l. Monthly and annual emissions (in pounds or tons) of each HAP listed or subsequently approved under Condition 46. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- m. Monthly and annual VOC throughput from the Dual Phase Soil Vapor Extraction Plant and the Air Stripping System. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- n. Annual facility wide HAP emissions calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- o. Records showing that the VOC content of the surface coating as applied during the surface coating process at spray booths 00047, 00066, 00050, and 00081 shall not exceed the limit in Condition 3.
- p. All fuel supplier certifications.
- q. Material Safety Data Sheets (MSDS) or other vendor information as approved by DEQ showing VOC content, toxic compound content, HAP content, water content, and solids content for all coatings and solvents, such as but not limited to paints, lacquers, reducers/thinners, and degreasers used.
- r. Records showing the dimensions and capacity of tank numbers: 170, 174, 175, 176, 177, 178, 179, 180, 181, and 221.
- s. Monthly fuel meter or mass balance records and observations.

- t. Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50 and 9 VAC 5-80-850 F)

- 55. **Emission Testing** - The facility shall be constructed/modified/installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9 VAC 5-80-880 and 9 VAC 5-80-850)

### **GENERAL CONDITIONS**

- 56. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-130 and 9 VAC 5-80-850)

- 57. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Piedmont Region of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Piedmont Region in writing.

(9 VAC 5-20-180 C and 9 VAC 5-80-850)

- 58. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 I and 9 VAC 5-80-850)

- 59. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source,

including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
(9 VAC 5-50-20 E and 9 VAC 5-80-850)

**60. Permit Suspension/Revocation** - This permit may be revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the terms or conditions of this permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
- e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application for this permit is submitted;
- f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.  
(9 VAC 5-80-1010)

**61. Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Region of the change of ownership within 30 days of the transfer.  
(9 VAC 5-80-940)

**62. Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.  
(9 VAC 5-80-860 D)

